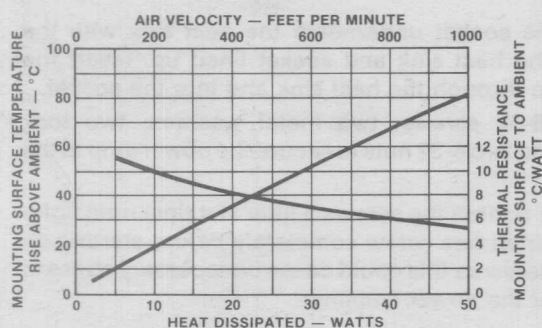


Intersil's 8520 series is a family of power operational amplifiers that have been specifically designed to drive linear and rotary actuators, electronic valves, push-pull solenoids and DC and AC motors . . . and a full range of other power control applications.

To evaluate these devices properly in the intended application, it will be necessary to transfer the heat from the package. However, locating and purchasing pre-drilled heat sinks and sockets can often cause delays of days or sometimes weeks. To avoid this problem and facilitate evaluation of these unique circuits, Intersil is offering a "Heat Kit" which contains the difficult hardware items. With the help of this kit, an engineer or technician can have the system "up and running" in a very short time.

Thermal Characteristics of Heat Sink Part Number 29-0305.



Three kits are offered depending on desired power output: the ICH8510EV/KIT is a 1 amp @ ± 24 volt kit, the ICH8520EV/KIT a 2 amp @ 24 Volt Kit and the ICH8530EV/KIT a 2.7 amp @ 24 volts. All kits contain the appropriate power op-amp, heat sink and socket.

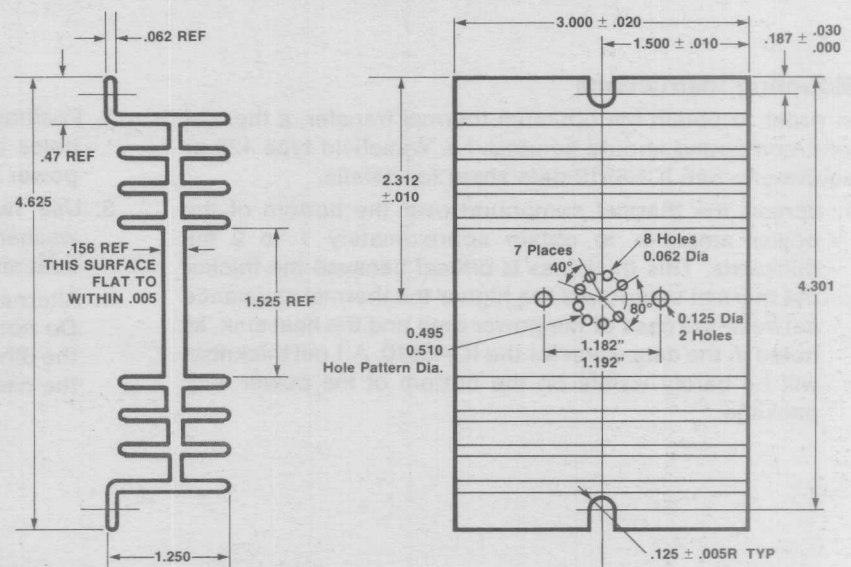
The following is the detailed information about the heat sink and socket:

Heat Sink

Heat sinks are available from Intersil. Order part number 29-0305. The heat sink may also be obtained from:

Thermalloy Inc.
2021 W. Valley View Lane
P. O. Box 34829
Dallas, TX 75234
P/N 6123B-15

Dimensional Outline



Notes:

- 1) $\Theta_{S/A} = 1.3^\circ \text{ C/W}$ for 0 ft/min air velocity.
- 2) Weight = 0.378 lbs.

Ordering Information

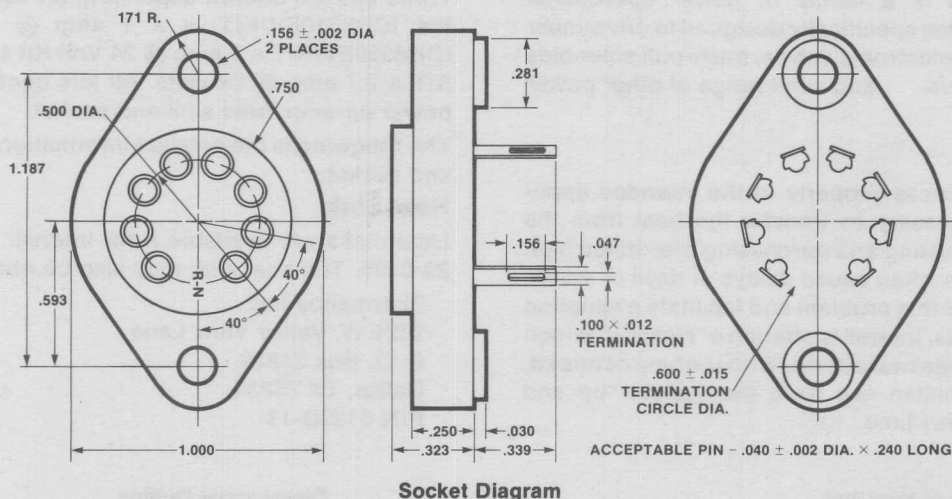
Part	Description	Temperature Range	Order P/N
8510I	Complete Kit Including 1 Amp Power Op-Amp	-25 to +85°C	ICH8510IEV/Kit
8510M	Complete Kit Including 1 Amp Power Op-Amp	-55 to +125°C	ICH8510MEV/Kit
8520I	Complete Kit Including 2 Amp Power Op-Amp	-25 to +85°C	ICH8520IEV/Kit
8520M	Complete Kit Including 2 Amp Power Op-Amp	-55 to +125°C	ICH8520MEV/Kit
8530I	Complete Kit Including 2.7 Amp Power Op-Amp	-25 to +85°C	ICH8530IEV/Kit
8530M	Complete Kit Including 2.7 Amp Power Op-Amp	-55 to +125°C	ICH8530MEV/Kit
29-0305	Heat Sink Only	—	29-0305
29-0306	Socket Only	—	29-0306

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Socket Information

8 pin TO-3 sockets are available from Intersil. Order part number 29-0306. This socket may also be obtained from:

Robinson-Nugent, Inc.
800 E. Eighth St.
New Albany, IN 47150
P/N 0002-011



Socket Diagram

Mounting Instructions

In order to obtain the optimum thermal transfer, a thermal joint compound should be used, i.e. Wakefield type 120 or equivalent. See ICH8510 data sheet for details.

1. Spread the thermal compound over the bottom of the power amplifier to obtain approximately 1 to 2 mil thickness. This thickness is critical because the thicker the thermal compound the higher the thermal resistance between the case of the power amp and the heat sink, as noted in the data sheet for the ICH8510. A 1 mil thickness will be barely visible on the bottom of the power amp package.

2. Position the socket underneath the heat sink with the holes of the heat sink and socket lined up. Insert the power amp through the heat sink and into the socket.
3. Use two 6-32 screws, two metal washers, two lock washers and two 6-32 nuts to secure the power amp to the heat sink.
4. Alternately tighten the screws a little at a time until tight. Do not tighten one screw completely before starting on the other screw as this could cause unnecessary stress to the case of the power amplifier.

INTERSIL

10710 N. Tantau Ave., Cupertino, CA 95014 (408) 996-5000 TWX: 910-338-0171

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